

The common inventive concept of the claims currently pending is the use of a nucleic acid molecule encoding a 1-deoxy-D-xylulose-5-phosphate synthase (DXPS) to enhance activity of this enzyme in plant cells which have a mevalonate independent IPP biosynthetic pathway and the provision of transgenic plant cells comprising a transgene capable of expressing DXPS or a functional equivalent thereof.

The inventors are the first to show that the IPP content in plants having a mevalonate independent pathway can be modified by the expression of a DXPS. Due to the highly conserved domains in DXPS enzymes of different organisms, the inventors have also found that enzymes from different organisms can be used to achieve a higher IPP content in plants. Therefore, although the DXPS polypeptides recited in claim 25 are derived from three different organisms, they are linked by the inventive concept that all three can be used to achieve a higher IPP content in transgenic plants. Therefore, Applicant respectfully requests that the Examiner reconsider the requirement for an election of a sequence with respect to claim 25.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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